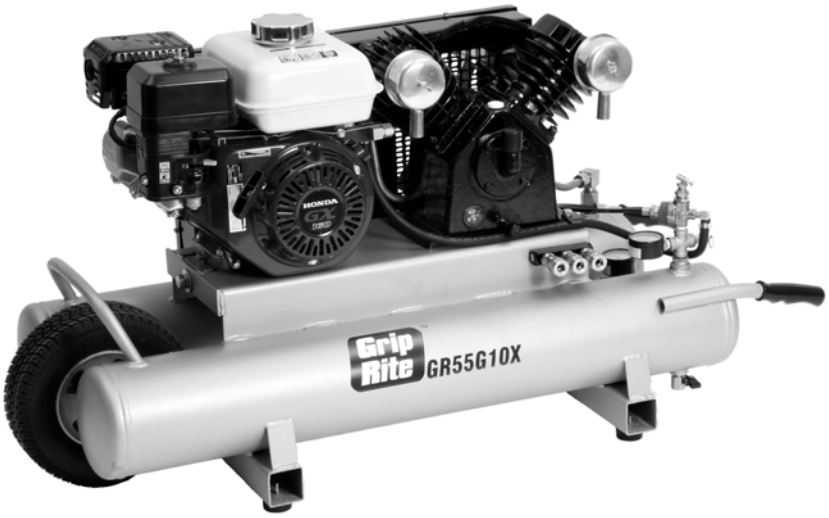
OPERATING MANUAL AND PARTS LIST

MODEL GR55G10X/GR90G10X COMPRESSORS



www.grip-rite.com

TABLE OF CONTENTS

Table of Contents 1

Safety Symbols 2

Safety Instructions 3

Specifications 5

Compressor Description 6

Compressor Parts Description 7

Set Up 8

Operation 9

Maintenance 10

GR55G10X Compressor Schematics and Parts Lists 12

GR90G10X Compressor Schematics and Parts Lists 17

Troubleshooting 22

Storage 25

Warranty 26

⚠ WARNING

This manual contains important safety and operating instructions that must be followed. You must read and understand this manual before operating this compressor. Failure to follow all instructions can result in serious injury to operator and bystanders, or damage to compressor and attachments.

SAFETY SYMBOLS

The safety symbols used on the compressor's safety labels and in this manual provide an important visual reminder of basic safety rules, and the hazards that may arise if all safety and operating instructions are not followed. Make sure you understand the meaning of each of these symbols, and protect yourself and others by obeying all safety and operating instructions on warning labels and in this manual.

SYMBOL	DESCRIPTION
	SAFETY ALERT SYMBOL **Calls attention to important safety information and provides an alert to potential safety hazards.**
	HOT SURFACE HAZARD **Hot surfaces can cause serious burn injury if touched. Let unit cool before handling.**
	MOVING PARTS/ENTANGLEMENT HAZARD **Contact with moving parts can cause serious injury. Keep guards and protective covers in place.**
	INHALATION HAZARD **Compressed air can contain carbon monoxide or other harmful gases. Do not use compressor to provide air for breathing.**
	BURST HAZARD **Over-pressurization caused by tampering with controls can cause serious injury or death from explosion.**
	SHOCK HAZARD **Contact with live electrical components can cause shock, serious injury, or death from electrocution. Use a properly grounded power source.**
	EXPLOSION HAZARD **Electrical sparks from unit can ignite flammable liquids and vapors. Use compressor in a well ventilated area free from explosive vapors.**
	FIRE HAZARD **Keep compressor 20' feet away from spray area when spraying flammable materials. Operate unit away from obstructions that could block ventilation.**
	HIGH PRESSURE AIR HAZARD **Release of pressurized air can cause serious injury if directed against body. Never use air pressure higher than recommended for tool or accessory.**

SAFETY INSTRUCTIONS

WEAR ANSI Z87.1 (In Canada, CSA Z94.3-99) APPROVED EYE PROTECTION - Always wear approved eye protection equipment that provides both front and side eye protection when operating or servicing the compressor.

DO NOT START OR OPERATE COMPRESSOR INDOORS OR IN POORLY VENTILATED AREAS - Gasoline engine produce carbon monoxide, a poisonous gas that can cause death or serious injury if inhaled. Use compressor outdoors only.

DO NOT EXCEED MAXIMUM RECOMMENDED OPERATING PRESSURE OF AIR-POWERED TOOLS OR OTHER EQUIPMENT BEING USED - Spray guns and other low to medium pressure equipment can burst, causing serious injury to user and bystanders. Read and follow all manufacturers' pressure recommendations before connecting tools, sprayers, or other equipment to compressor. Use extreme care when using the compressor with tires, inner tubes, and other inflatables, as excessive pressure or rapid inflation can cause these items to burst.

DO NOT OPERATE IF FLAMMABLE VAPORS ARE PRESENT - The electric motor and pressure switch may produce sparks, which can ignite flammable vapors and cause fire or explosion. Flammable vapors from gasoline, solvents, adhesives, and other chemicals may drift some distance from the source, or build up in low areas. Operate the compressor only in well-ventilated areas that are free of flammable vapors.

DO NOT TOUCH COMPRESSOR MOTOR, HEAD, OR TUBING WHEN UNIT IS OPERATING - Normal compressor operation will cause tubing and other components to become extremely hot. Contact with hot parts can cause serious burns. Allow unit to cool before handling or performing service.

NEVER DIRECT COMPRESSED AIR AT ANY BODY PARTS - Compressed air can penetrate skin, or force dirt and debris into eyes, causing serious injury. Never place hands or body parts over the air discharge opening of a pressurized nozzle or fitting. Use care when connecting and disconnecting air hose to attachments, pneumatic tools, and other air-powered devices.

KEEP FLAMMABLE SPRAYS AWAY FROM SPARKS AND OTHER SOURCES OF IGNITION - Spraying flammable liquids such as oil-base paints, sealers, and finishes near sparks, open flame, and other sources of ignition such as pilot lights, appliances, water heaters, furnaces, etc. can result in explosion and fire. Turn off all pilot lights, and avoid using electrical appliances, heaters, torches, and other equipment that may produce sparks or flame. Keep compressor as far away from spraying area as possible by using an air hose of sufficient length to prevent spray mist from being ignited by electrical sparks from compressor operation.

SAFETY INSTRUCTIONS

DO NOT TAMPER WITH COMPRESSOR PRESSURE SWITCH SETTINGS - The pressure switch settings set at the factory provide the maximum safe operating pressure recommended for this compressor. Altering these settings can result in over-pressurization, risk of tank, hose, and pneumatic equipment failure, and serious injury to operator and bystanders.

USE AIR HOSE RATED FOR 150 PSI OR GREATER - Air hose must be rated to safely handle maximum compressor pressure. Air hose that does not meet minimum pressure requirements can rupture, releasing high pressure air. Replace a cracked or leaking air hose immediately to prevent serious injury from contact with high pressure air streams.

SHUT OFF COMPRESSOR AND RELIEVE TANK PRESSURE BEFORE SERVICING UNIT – Never perform service or maintenance on any part of the compressor while the unit is running or tanks are pressurized. Open tank drains slowly to allow air to escape, and keep clear of air stream.

DO NOT MODIFY COMPRESSOR – Altering the compressor in any way may create a serious safety hazard, and result in serious injury to operator and bystanders. If compressor does not work properly, stop using unit immediately. Return unit to an authorized service center for repairs if problem cannot be remedied by following troubleshooting instructions in this manual.

DO NOT USE COMPRESSED AIR FROM THE UNIT FOR BREATHING PURPOSES - Air produced by this compressor may contain poisonous exhaust gases from the engine, and is not suitable for breathing purposes.

DO NOT REFUEL A HOT OR RUNNING ENGINE - Fuel vapor can be ignited by hot surfaces, causing fire, explosion, and serious injury to operator and bystanders.

REFILL FUEL TANK OUTDOORS ONLY - Fuel vapor can be ignited by pilot lights, electronic igniters, electric motors, and other sources of heat, sparks, or open flame. Move compressor away from refueling area before starting to avoid fire risk from fuel spills or vapor.

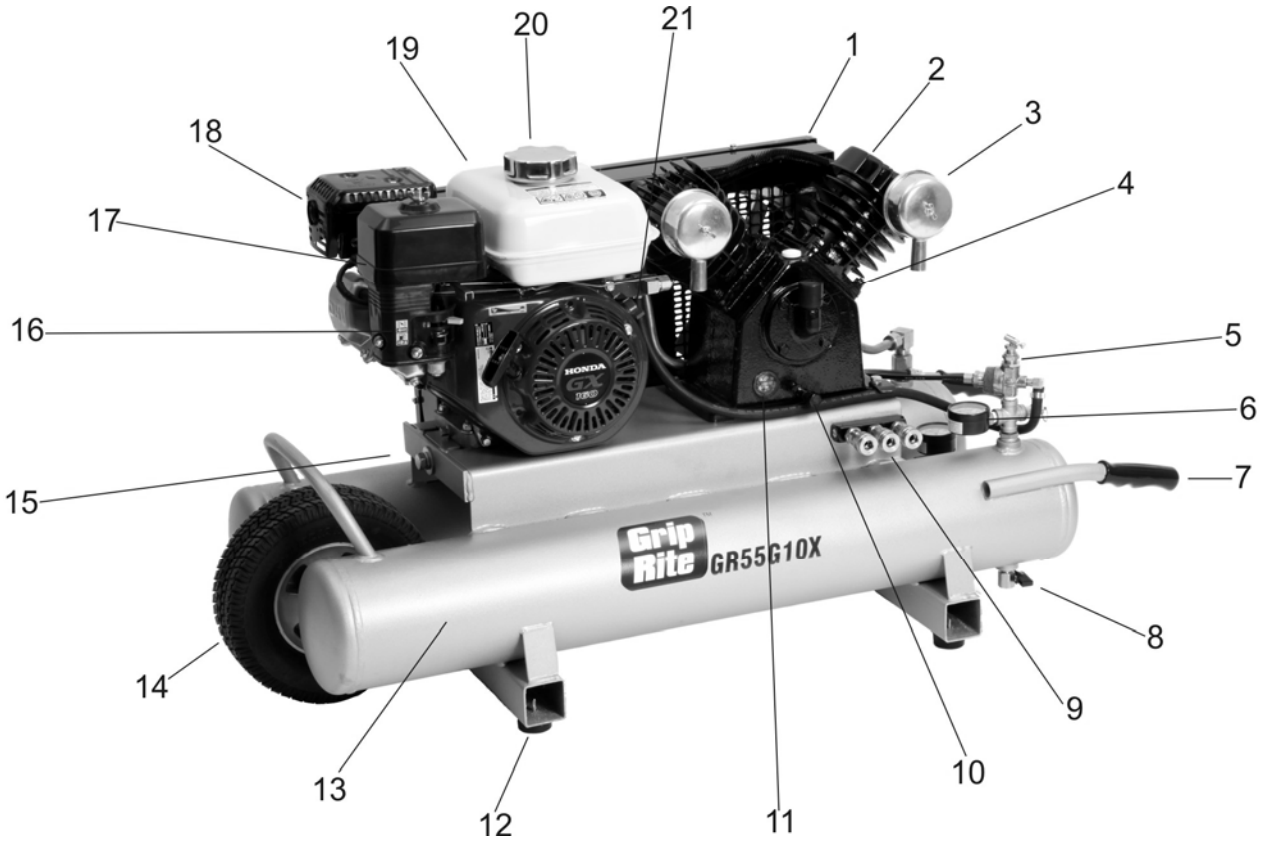
DO NOT LEAVE COMPRESSOR RUNNING UNATTENDED - Shut compressor off when done, and disconnect air hoses to prevent unauthorized use of compressor. Drain air tanks if unit is to be stored or transported.

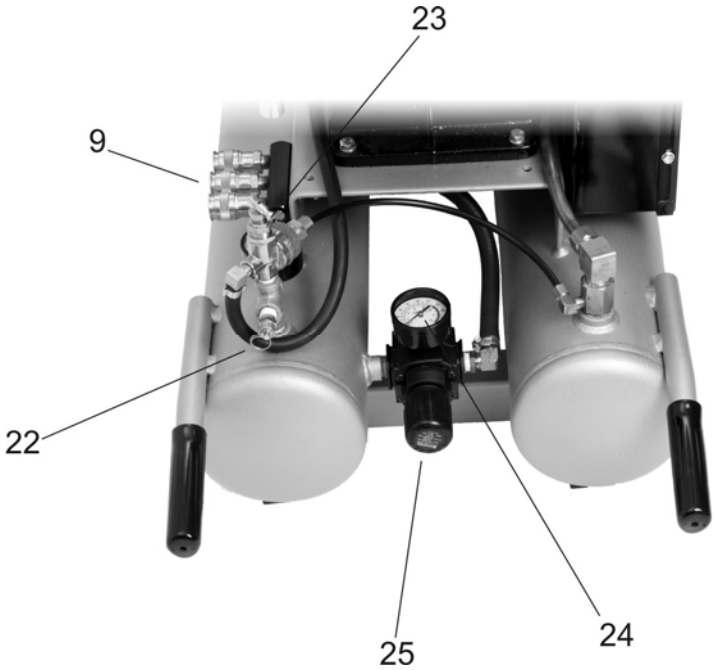
NEVER USE A COMPRESSOR WITH A FUEL LEAK - Leaking fuel can be ignited by hot surfaces on the unit, resulting in fire, explosion, and serious injury to operator and bystanders. Stop using a unit with a fuel leak immediately, and shut engine off. Allow unit to cool before handling or moving. All fuel leaks are potentially serious and must be handled with extreme caution.

SPECIFICATIONS

DESCRIPTION	SPECIFICATIONS	
Motor	**GR55G10X**	**GR90G10X**
Horsepower	5.5	9.0
Engine	Honda GX160	Honda GX270
Capacity		
Tanks	2	2
Air Storage Capacity	10 Gallons	10 Gallons
Maximum Air Pressure	135 PSI	135 PSI
CFM	12.5 cfm @ 100 PSI	18.5 cfm @ 100 PSI
Pressure Switch Settings		
Pressure Switch - ON	105 PSI	105 PSI
Pressure Switch - OFF	135 PSI	135 PSI
Compressor Pump		
Cylinders	2	3
Compression Stage	Single	Single
Lubrication	Splash	Splash
Oil Type	Mineral Oil*	Mineral Oil*
*Non-Detergent	SAE 10W - 30W	SAE 10W - 30W
	ISO 32 - 100	ISO 32 - 100
Crankcase	Cast Iron	Cast Iron
Bearings	Ball	Ball
Cylinders	Cast Iron	Cast Iron
Valves	Stainless Steel	Stainless Steel
Head	Aluminum	Aluminum
Filter	Canister	Canister
Dimensions		
Weight	170 Lbs.	220 Lbs.
Shipping Weight	(198) Lbs.	(246) Lbs.
Size (L X W X H)	46" X 19" X 24"	46" X 19" X 24"

COMPRESSOR DESCRIPTION





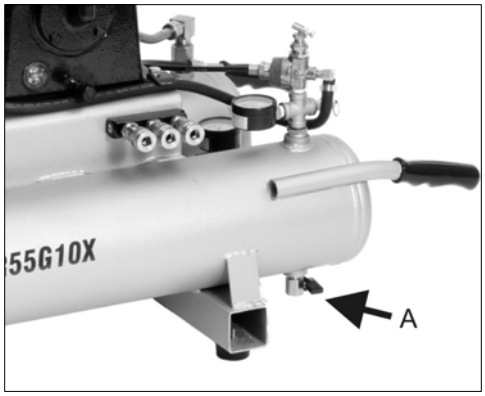
COMPRESSOR PARTS DESCRIPTION

KEY	DESCRIPTION	FUNCTION
1	Belt Guard	Guards V-belt and pulleys
2	Compressor Pump	Compresses air
3	Compressor Air Intake	Contains air filter element
4	Crankcase breather/fill plug	Used to vent/fill pump crankcase
5	Pilot Valve	Controls engine throttle
6	Tank Air Pressure Gauge	Indicates air pressure in storage tanks
7	Rubber Hand Grips	Provides secure grip for comfortable handling
8	Tank Drain Cock	Allows tanks to be drained of moisture
9	Quick Connect Fittings	Allows quick connection of air hoses
10	Pump Oil Drain Tube	Drains oil for easy oil changes
11	Oil Level Sight Glass	Indicates oil level in pump crankcase
12	Cushioned Rubber Foot	Provides stable footing, reduces vibration
13	Twin Air Storage Tanks	Stores compressed air
14	No Flat Tire	Large semi-pneumatic tire allows easy rolling
15	Easy Belt Tightening System	Allows for easy belt tension adjustment
16	Engine Fuel/Choke Controls	Opens fuel line and sets choke for quick starts
17	Engine Air Filter	Keeps dirt and debris out of engine
18	Engine Exhaust Muffler	Reduces engine noise
19	Engine Fuel Tank	Stores fuel for long run times
20	Fuel Tank Cap	Seals fuel tank filler opening
21	Engine On-Off Switch	Use to start or stop engine
22	Pressure Relief Valve	Releases excessive air pressure from tank
23	Pilot Valve Manual Release	Opens valve to release air pressure
24	Air Outlet Pressure Gauge	Indicates air pressure at air outlet fittings
25	Regulator Control Knob	Adjusts output air pressure setting

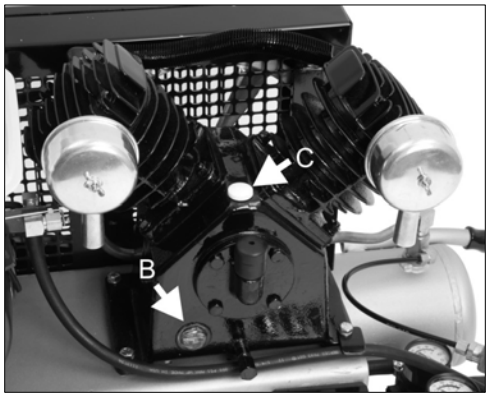
SET UP PROCEDURE

⚠ WARNING:

Before being operated with pressurized tanks for the first time, your new compressor requires a simple set-up procedure that will help your unit deliver years of trouble-free service. Failure to follow all initial set-up instructions may result in serious damage to your compressor, property damage, or serious injury to operator and bystanders. Do not allow compressor to pressurize tanks until all set-up steps have been performed.



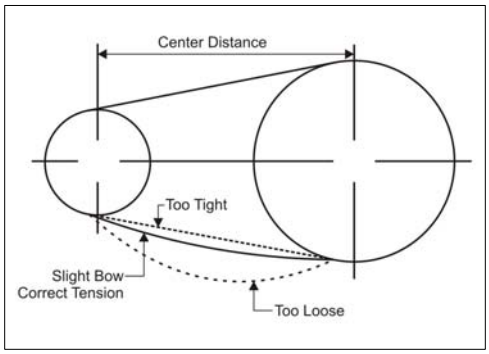
1. Read the entire engine manual.
2. Check compressor and engine oil levels, and fill as needed. (See #10 below)
3. Fill the fuel tank carefully, observing all safety rules for handling gasoline. Don't overfill - leave 1/2" at filler opening for expansion.
4. Open the tank drain cock (A), or outlet valve.
5. Start the engine (see page 9), and run the compressor for 20 minutes with drain cock open to lubricate the bearings and pistons.
6. After 20 minutes, close the drain valve or outlet valve.
7. Compressor is now ready for normal, pressurized operation.
8. After first 24 hours of operation, check V-belt tension. Correct tension setting is 1/2" of slack when measured at midpoint between pulleys.
9. Check bolts and nuts periodically and tighten when necessary.
10. Check oil level at sight glass (B). Oil level must be maintained between "L" (Low) and "H" (High) indicator lines. To add oil, remove oil filler plug (C) and fill until sight glass shows proper level. Change oil after first 100 hours of operation. Add non-detergent mineral oil to compressor.



11. Use chart below for correct viscosity:

Air Temperature	Viscosity
3 – 32° F (16 - 0° C)	SAE 10W (ISO 32)
34 – 79° F (1 - 26° C)	SAE 20W (ISO 68)
80° F & Up (27° C & Up)	SAE 30W (ISO 100)

12. Replace oil filler plug before starting compressor.



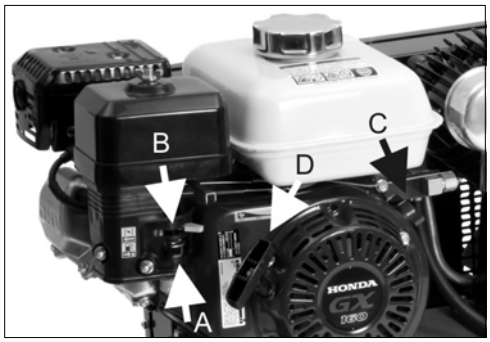
OPERATION

STARTING ENGINE

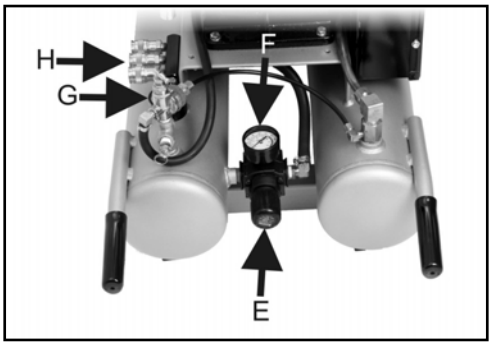
Pre-starting Checklist:

Always check and correct before starting:

- Check unit for missing parts or damage.
- Check for loose nuts and bolts.
- Check compressor and engine oil levels.
- Fill gas tank. Tighten gas cap securely.
- Check for fuel leaks.



1. Move fuel lever (A) to the ON position.
   Cold Engine - move choke lever (B) to CLOSED position.
   Warm Engine - leave choke lever (B) in OPEN position
2. Turn engine switch (C) to the "ON" position.
3. Pull starter grip (D) softly until you feel light resistance, then pull briskly. Return starter grip to starting position. If engine does not start, repeat.
4. When engine starts, slowly move the choke lever (B) to the OPEN position.
5. Adjust outlet air pressure to desired setting by turning pressure regulator knob “E.” Turn knob clockwise (+) to increase air pressure, counterclockwise (-) to decrease air pressure. Outlet air pressure is indicated by gauge (F). Tank pressure is indicated by gauge (G)
6. Connect air hoses to quick-connect fittings (H) using a male quick-connect fitting. To connect air hose, push back outer ring on compressor fitting, insert male hose connector, and release ring. To release air hose, push hose fitting in, push back outer ring on compressor fitting, and pull male hose connector out.



⚠ WARNING

High pressure air will escape when hose is disconnected. Keep face away from fittings to prevent dirt and debris from being blown into eyes. Always wear safety glasses with side shields to protect eyes when using compressor.

OPERATION

NORMAL OPERATION

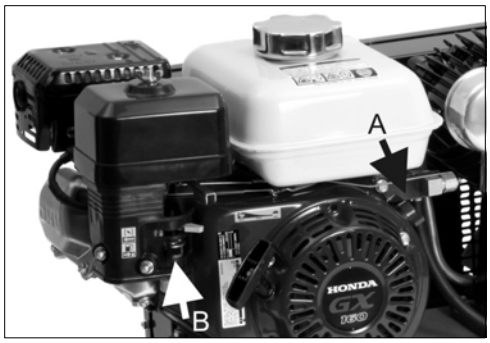
Engine runs at normal running speed until maximum tank air pressure is reached. When maximum pressure is reached, engine speed automatically resets to idle. Engine speed remains at idle until tank pressure drops to the minimum air pressure setting. Engine continues cycling between normal and idle speed automatically until turned off.

Air tools and attachments with air consumption requirements that exceed the compressor's rated air output volume may cause the compressor to run continuously at normal running speed, or cause a drop in output air pressure below gage setting. If this happens, allow tank pressure to recover before continuing use of tool or attachment.

If tank pressure exceeds factory preset maximum, the safety valve will open and allow excess pressure to exhaust. If safety valve is actuated, allow pressure to exhaust, stop compressor, and correct problem.

STOPPING COMPRESSOR

1. Turn engine ON-OFF switch (A) to the OFF position.
2. Turn the fuel lever (B) to the OFF position.
3. End of day shutdown -
   - Disconnect air hoses
   - Open drain cock to relieve air pressure and drain water from tank
   - Close drain cock
   - Check for missing parts or damage



MAINTENANCE

⚠ DANGER

Never perform maintenance on the compressor when it is running. Always place Fuel and On/Off switches in "OFF" position, disconnect air hoses, drain air tanks, and allow unit to cool first. Performing service procedures on a compressor with pressurized tanks, or in the "ON" position, can result in serious injury.

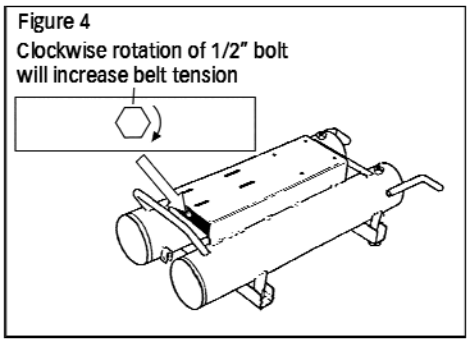
MAINTENANCE

Maintenance Schedule

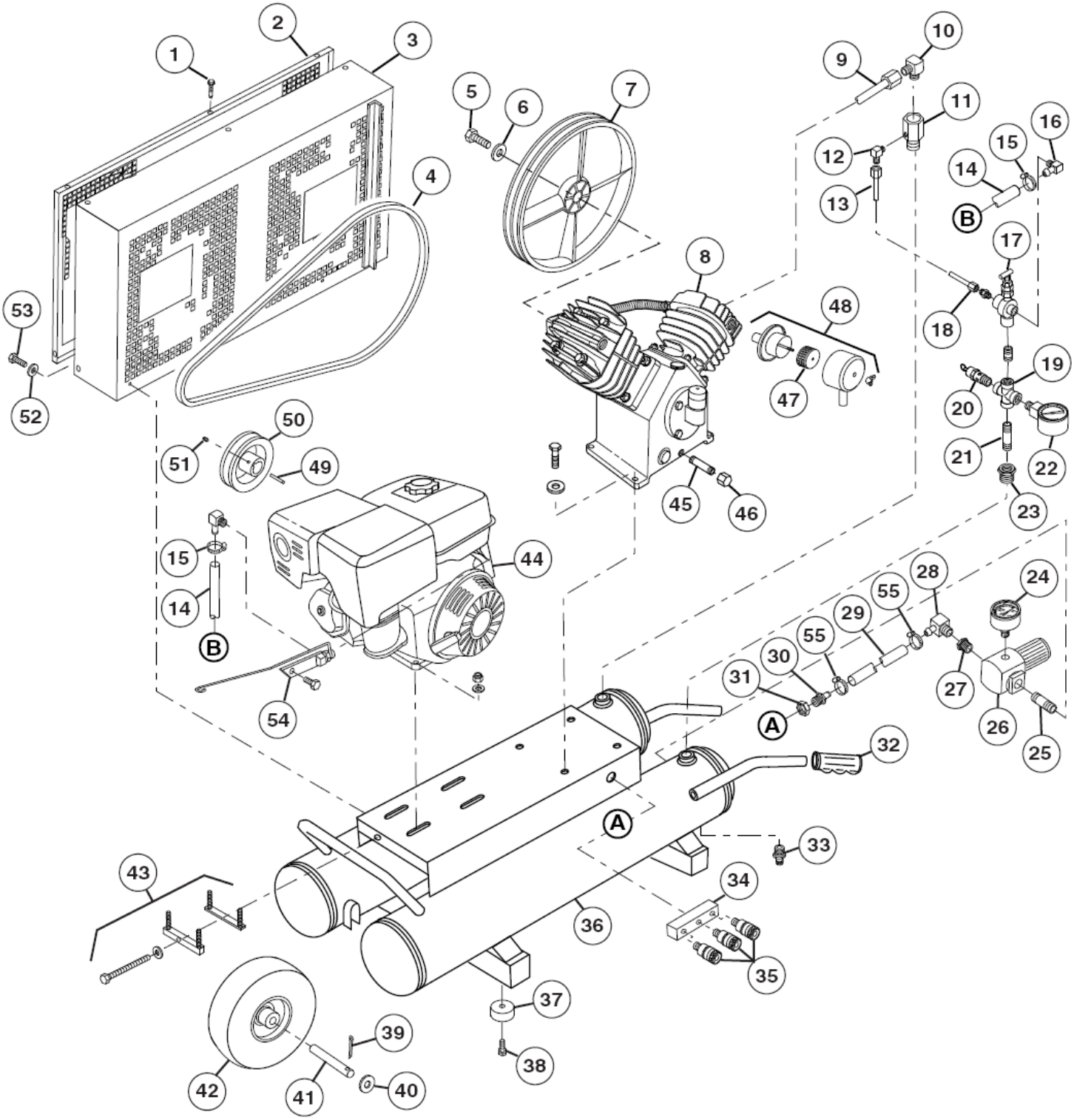
COMPRESSOR MAINTENANCE CHART	
Interval	**Maintenance Required**
Daily	Check compressor pump and engine lubricant levels, and fill as needed.
	Drain moisture from tanks daily. Open drain slowly and let air pressure bleed down gradually before opening drain valve completely.
	Perform a visual inspection of compressor. Make sure belt guard is in place, and all components are in good condition.
	Check for unusual noise or vibration during operation, and have problem corrected. Contact your Grip-Rite dealer for service.
Weekly	Check intake air filters and clean with soapy water if necessary. Rinse and allow to dry before use. Replace filter if worn or damaged.
	Check Pressure Relief Valve for proper operation. With tank pressurized, pull on Pressure Relief Valve ring. Air must exhaust when ring is pulled. Release ring - air must stop exhausting when ring is released.
	Check V-belt for damage or wear and replace if necessary.
	Clean dust and debris from cylinder heads, motor, fan blades, intercooler, and air tanks.
	Check for leaks, cracks, or corrosion on tank, fittings, and tubing. Discontinue use of equipment if leaks or other major problems are found, and repair unit before placing back into service.
3 Months/ 300 Hours	Change compressor oil and air filter.
	Clean/blow off compressor pump fins and motor.
	Check for air leaks at connections, and tighten fittings if necessary.
	Check tank for cracks, corrosion, leaks, or other damage. Never use a compressor with a damaged tank.
	Check warning labels for legibility, and replace if necessary. Contact your Grip-Rite dealer for replacement labels.

Belt Replacement/Adjustment

1. Shut off compressor and open drain cock to relieve pressure.
2. Loosen locknuts for engine hold-down bolts only until washers beneath spin freely.
3. Rotate ½" adjusting bolt clockwise until desired tension is reached. (See Figure 4).
4. Retighten locknuts to secure engine.
5. Close drain cock and restart compressor.
6. Check belt tension after first 20 hours of operation, then check monthly.



GR55G10X COMPRESSOR SCHEMATIC- TANK / FRAME



GR55G10X COMPRESSOR PARTS LIST- TANK / FRAME

REF NO.	DESCRIPTION	QTY.	PART #
1	Screw	5	GRCE1490
2	Belt Guard Cover	1	GRCE1160
3	Belt Guard Base	1	GRCE1140
4	Belt	1	GRCE1340
5	Bolt	1	GRCE1630
6	Washer	1	GRCE1640
7	Flywheel	1	GRCE1800
8	Complete Pump with Flywheel	1	GRCE840
9	Delivery Tube with Fittings	1	GRCE1420
10	Elbow	1	GRCE1290
11	Check Valve	1	GRCE1360
12	Elbow	1	GRCE1260
13	Tubing - 1/4”	1.2’	GRCE1100
14	Rubber Hose - 1/4”	2.5’	GRCE1020
15	Screw Clamp	2	GRCE1310
16	Elbow	1	GRCE1270
17	Pilot Valve	1	GRCE1060
18	Nut	2	GRCE1300
	Ring	2	GRCE1320
	Insert	2	GRCE1330
19	Cross	1	GRCE1210
20	Safety Valve	1	GRCE1590
21	Nipple	1	GRCE1220
22	Gauge	1	GRCE1410
23	Bushing	1	GRCE1190
24	Gauge	1	GRCE1400
25	Nipple	1	GRCE1240
26	Regulator	1	GRCE1560
27	Bushing	1	GRCE1180
28	Elbow	1	GRCE1280
29	Rubber Hose - 3/8”	1.34’	GRCE1090

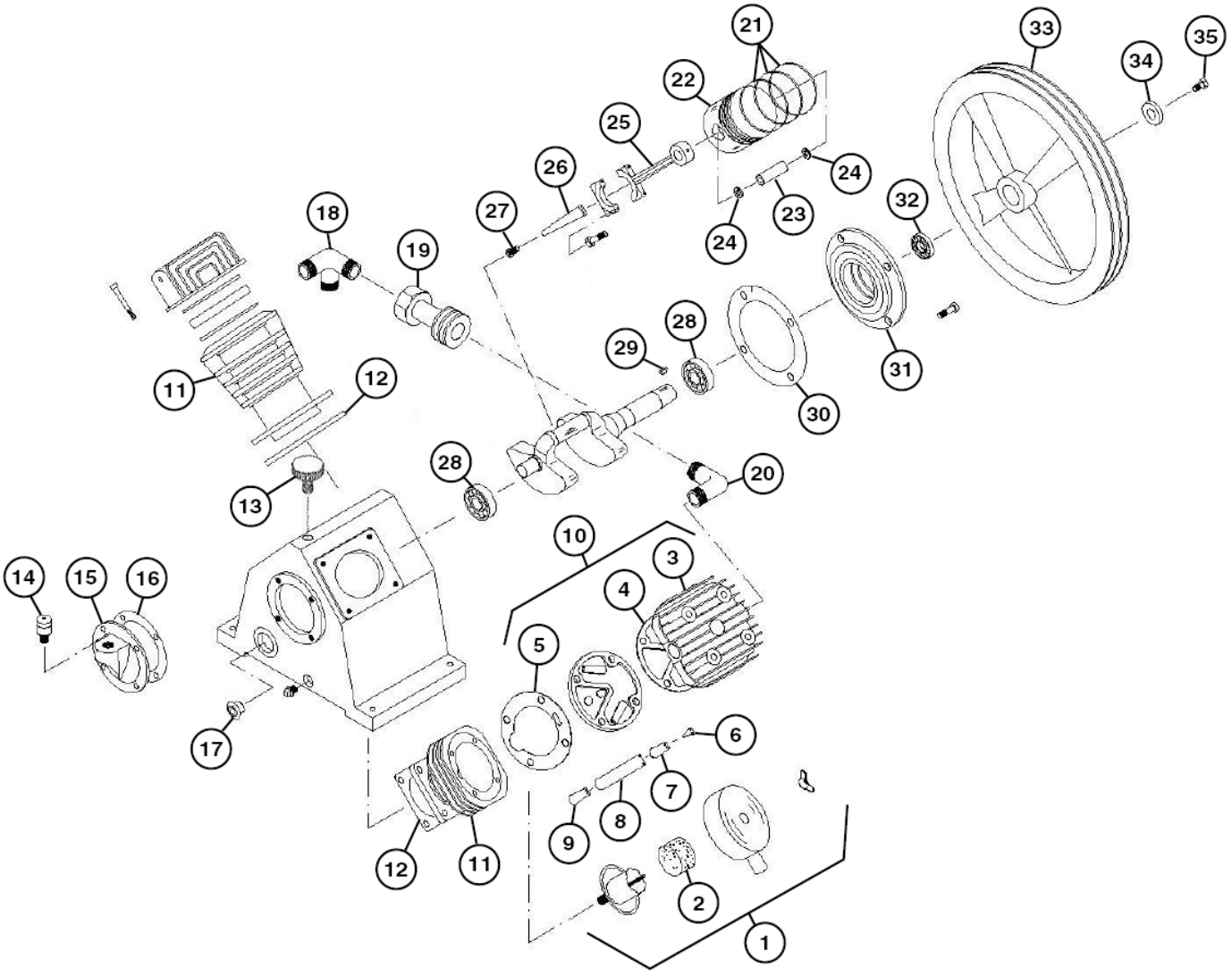
B	**VALVE REPAIR KIT INCLUDES:**	2	GRCE20
	VALVE SEAT TO HEAD GASKET #5		
	2 OUTLET VAVLE PLATES #6		
	INTAKE VALVE PLATE #7		
	6 VALVE PLATE SCREWS		
	VALVE SEAT TO CYLINDER GASKET #8		

GR55G10X COMPRESSOR PARTS LIST- TANK / FRAME

REF NO.	DESCRIPTION	QTY.	PART #
30	Hose Barb	1	GRCE1250
31	Washer -1/2"	1	GRCE2230
32	Handle Grip	2	GRCE1050
33	Drain Valve	2	GRCE1070
34	Triple Manifold	1	GRCE1450
35	Quick Coupler	3	GRCE1390
36	Tank Assembly	1	GRCE1600
37	Rubber Pad	4	GRCE1040
38	Screw	4	GRCE1460
39	Cotter Pin	2	GRCE1110
40	Machine Bushing	6	GRCE1520
41	Axle	1	GRCE1030
42	Wheel	1	GRCE1620
43	Belt Tensioner Kit	1	GRCE1570
44	Engine	1	GRCE720
45	Drain Pipe	1	GRCE870
46	Cap	1	GRCE1200
47	Element	2	GRCE50
48	Intake Filter Assembly	2	GRCE130
49	Keystock	1	GRCE1500
50	Pulley	1	GRCE1540
51	Setscrew	1	GRCE1470
52	Washer	2	GRCE1530
53	Bolt	2	GRCE1480
54	Idle Control Kit	1	GRCE1120
55	Clamp	2	GRCE1080

C	**RING REPAIR KIT INCLUDES:**	2	GRCE40
	VALVE SEAT TO HEAD GASKET #5		
	VALVE SEAT TO CYLINDER GASKET #8		
	2 COMPRESSION RINGS		
	1 OIL CONTROL RING		
	CYLINDER TO CRANKCASE GASKET #16		
D	**VALVE PLATE ASSEMBLY (NOT SHOWN) INCLUDES:**	2	GRCE530
	LIFT LIMITER - DISCHARGE VALVE PLATE #3		
	VALVE SEAT #4		
	DISCHARGE VALVE PLATE #6		
	INTAKE VALVE PLATE #7		

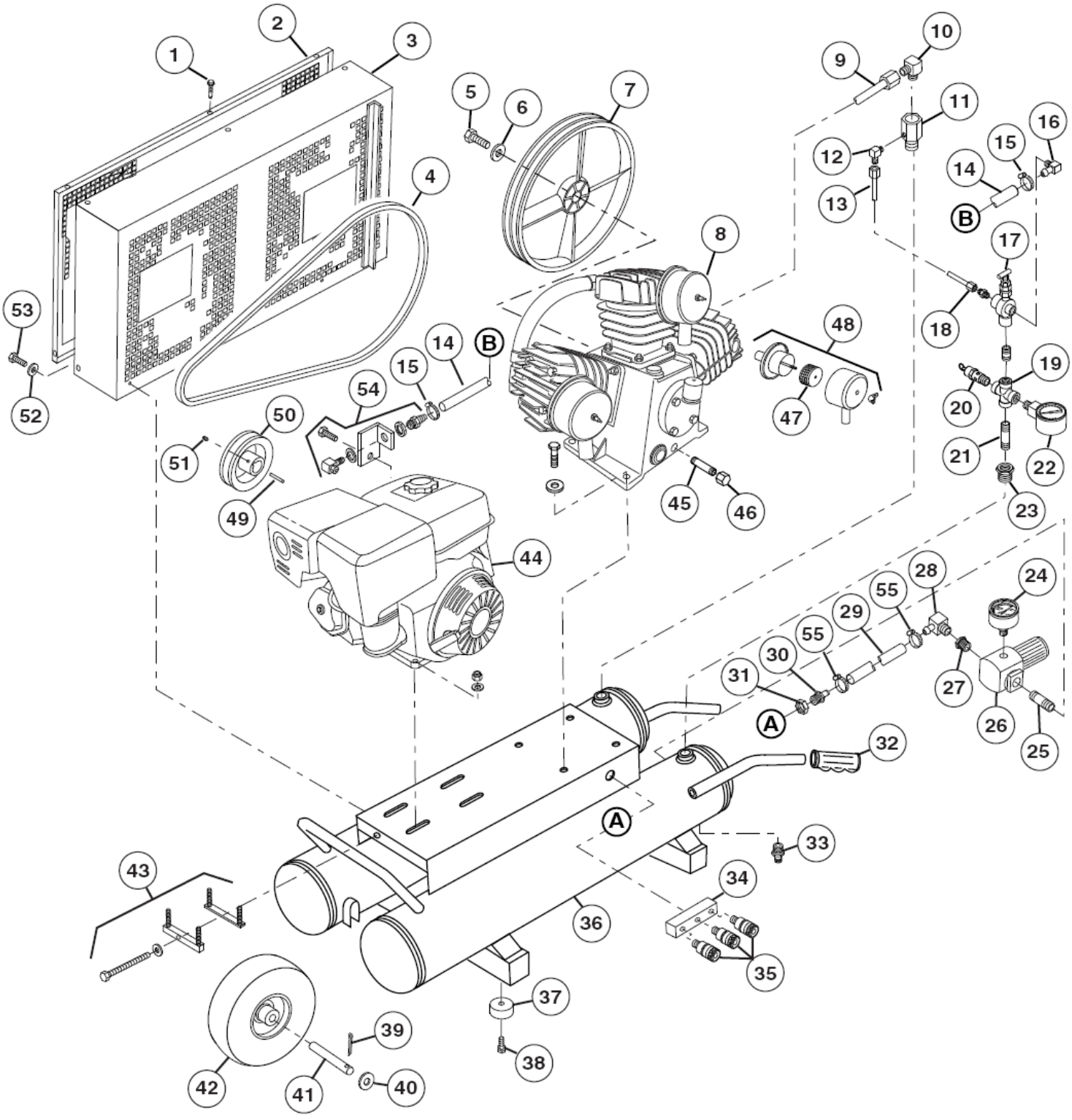
GR55G10X COMPRESSOR PARTS LIST - PUMP



GR55G10X COMPRESSOR PARTS LIST - PUMP

REF #	PART #	DESCRIPTION	QTY
1	GRCE130	Intake Filter Assembly	2
2	GRCE50	Intake Element	2
3	GRCE520	Cylinder Head	2
4	GRCE570	Gasket	2
5	GRCE560	Gasket	2
6	GRCE1660	Triangle Valve Spring	2
7	GRCE210	Lift Limiter	4
8	GRCE550	Inlet Valve	2
9	GRCE1670	Outlet Valve	4
	GRCE1680	Lock Screws (not shown)	12
10	GRCE1690	Valve Plate Assembly (items 4-9)	2
11	GRCE580	Cylinder	2
12	GRCE330	Gasket	2
13	GRCE100	Oil Fill Plug	1
14	GRCE110	Crankcase Vent	1
15	GRCE380	Bearing Carrier - Rear	1
16	GRCE390	Gasket	1
17	GRCE120	Oil Sight Gauge	1
18	GRCE310	Y-Fitting	1
19	GRCE450	Discharge Pipe	1
20	GRCE140	Elbow	1
21	GRCE1440	Ring Set	2
22	GRCE410	Piston	2
23	GRCE1710	Piston Pin	2
24	GRCE1720	Snap Ring	4
25	GRCE430	Connecting Rod with Dipper	2
26	GRCE1730	Dipper - Angled	2
27	GRCE1750	Bolt - Dipper	4
28	GRCE610	Bearing	2
29	GRCE1760	Keystock	1
30	GRCE370	Gasket	1
31	GRCE360	Bearing Carrier - Front	1
32	GRCE400	Oil Seal	1
33	GRCE1800	Flywheel	1
34	GRCE1640	Washer	1
35	GRCE1630	Bolt	1

GR90G10X COMPRESSOR SCHEMATIC- TANK / FRAME



GR90G10X COMPRESSOR PARTS LIST - TANK/FRAME

REF NO.	DESCRIPTION	QTY.	PART #
1	Screw	5	GRCE1490
2	Belt Guard Cover	1	GRCE1170
3	Belt Guard Base	1	GRCE1150
4	Belt	1	GRCE1350
5	Bolt	1	GRCE1630
6	Washer	1	GRCE1640
7	Flywheel	1	GRCE1650
8	Complete Pump with Flywheel	1	GRCE850
9	Delivery Tube with Fittings	1	GRCE1430
10	Elbow	1	GRCE1290
11	Check Valve	1	GRCE1360
12	Elbow	1	GRCE1260
13	Tubing - 1/4”	1.2’	GRCE1100
14	Rubber Hose - 1/4”	2.5’	GRCE1020
15	Screw Clamp	2	GRCE1310
16	Elbow	1	GRCE1270
17	Pilot Valve	1	GRCE1060
18	Nut	2	GRCE1300
	Ring	2	GRCE1320
	Insert	2	GRCE1330
19	Cross	1	GRCE1210
20	Safety Valve	1	GRCE1590
21	Nipple	1	GRCE1220
22	Gauge	1	GRCE1410
23	Bushing	1	GRCE1190
24	Gauge	1	GRCE1400
25	Nipple	1	GRCE1240
26	Regulator	1	GRCE1560
27	Bushing	1	GRCE1180
28	Elbow	1	GRCE1280
29	Rubber Hose - 3/8”	1.34’	GRCE1090

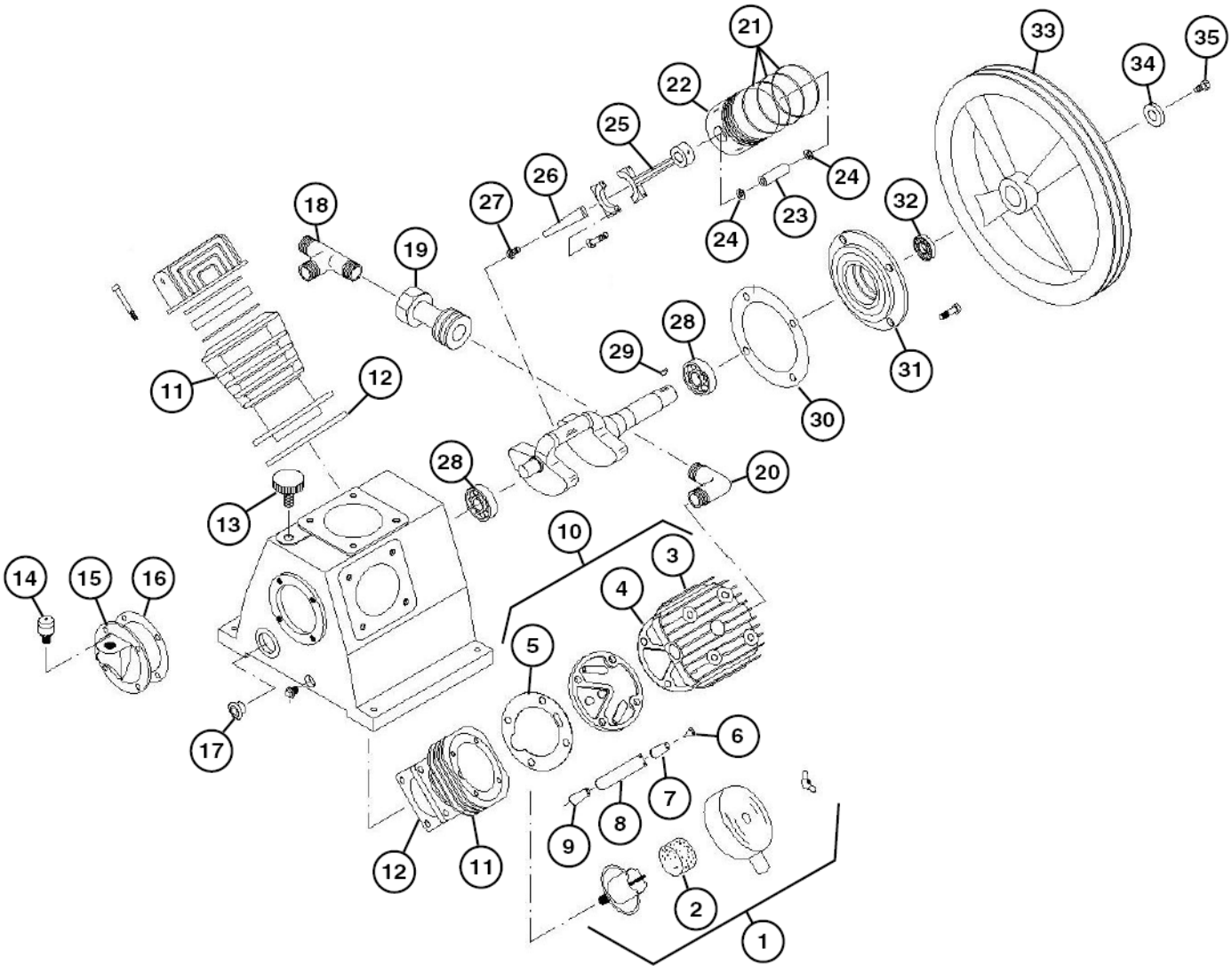
B	**VALVE REPAIR KIT INCLUDES:**	3	GRCE20
	VALVE SEAT TO HEAD GASKET #5		
	2 OUTLET VAVLE PLATES #6		
	INTAKE VALVE PLATE #7		
	6 VALVE PLATE SCREWS		
	VALVE SEAT TO CYLINDER GASKET #8		

GR90G10X COMPRESSOR PARTS LIST - TANK/FRAME

REF NO.	DESCRIPTION	QTY.	PART #
30	Hose Barb	1	GRCE1250
31	Washer -1/2"	1	GRCE2230
32	Handle Grip	2	GRCE1050
33	Drain Valve	2	GRCE1070
34	Triple Manifold	1	GRCE1450
35	Quick Coupler	3	GRCE1390
36	Tank Assembly	1	GRCE1610
37	Rubber Pad	4	GRCE1040
38	Screw	4	GRCE1460
39	Cotter Pin	2	GRCE1110
40	Machine Bushing	6	GRCE1520
41	Axle	1	GRCE1030
42	Wheel	1	GRCE1620
43	Belt Tensioner Kit	1	GRCE1580
44	Engine	1	GRCE730
45	Drain Pipe	1	GRCE870
46	Cap	1	GRCE1200
47	Element	3	GRCE50
48	Intake Filter Assembly	3	GRCE130
49	Keystock	1	GRCE1510
50	Pulley	1	GRCE1550
51	Setscrew	1	GRCE1470
52	Washer	2	GRCE1530
53	Bolt	2	GRCE1480
54	Idle Control Kit	1	GRCE1130
55	Clamp	2	GRCE1080

C	**RING REPAIR KIT INCLUDES:**	3	GRCE40
	VALVE SEAT TO HEAD GASKET #5		
	VALVE SEAT TO CYLINDER GASKET #8		
	2 COMPRESSION RINGS		
	1 OIL CONTROL RING		
	CYLINDER TO CRANKCASE GASKET #16		
D	**VALVE PLATE ASSEMBLY (NOT SHOWN) INCLUDES:**	3	GRCE530
	LIFT LIMITER - DISCHARGE VALVE PLATE #3		
	VALVE SEAT #4		
	DISCHARGE VALVE PLATE #6		
	INTAKE VALVE PLATE #7		

GR90G10X COMPRESSOR SCHEMATIC - PUMP



GR90G10X COMPRESSOR PARTS LIST - PUMP

REF #	PART #	DESCRIPTION	QTY
1	GRCE130	Intake Filter Assembly	3
2	GRCE50	Intake Element	3
3	GRCE520	Cylinder Head	3
4	GRCE570	Gasket	3
5	GRCE560	Gasket	3
6	GRCE1660	Triangle Valve Spring	6
7	GRCE210	Lift Limiter	6
8	GRCE550	Inlet Valve	3
9	GRCE1670	Outlet Valve	6
	GRCE1680	Lock Screws (not shown)	18
10	GRCE1690	Valve Plate Assembly	3
11	GRCE580	Cylinder	3
12	GRCE330	Gasket	3
13	GRCE100	Oil Fill Plug	1
14	GRCE110	Crankcase Vent	1
15	GRCE380	Bearing Carrier	1
16	GRCE390	Gasket	1
17	GRCE120	Oil Sight Gauge	1
18	GRCE1700	T-Fitting	2
19	GRCE490	Discharge Pipe	2
20	GRCE140	Elbow	1
21	GRCE1440	Ring Set	3
22	GRCE410	Piston	3
23	GRCE1710	Piston Pin	3
24	GRCE1720	Snap Ring	6
25	GRCE430	Connecting Rod with Dipper	3
26	GRCE1730	Dipper - Angled	2
	GRCE1740	Dipper - Straight	1
27	GRCE1750	Bolt - Dipper	6
28	GRCE610	Bearing	2
29	GRCE1760	Keystock	1
30	GRCE370	Gasket	1
31	GRCE360	Bearing Carrier - Front	1
32	GRCE400	Oil Seal	1
33	GRCE1650	Flywheel	1
34	GRCE1640	Washer	1
35	GRCE1630	Bolt	1

TROUBLESHOOTING

PROBLEM	CAUSE	REMEDY
Compressor won't start	On/Off switch in OFF position	Move switch to ON position
	Fuel Switch in OFF position	Move switch to ON position
	Choke lever in Open Choke (running) position	Move lever to Closed choke (starting) position
	Fuel tank empty	Fill fuel tank
	Spark plug fouled	Replace spark plug
	Motor air filter plugged	Replace filter
	Other	Refer to engine manufacturer's manual
Low pressure	Drain cock open or loose	Close or tighten
	Safety relief valve leaks	Replace
	Open or broken unloader valve	Replace
	Dirty or plugged air filter	Clean or replace as necessary
	Air fitting on hose stuck open	Repair or replace
Oil in discharge	Improper oil viscosity	Drain and replace oil
	Too much oil in crankcase	Drain oil to proper level
	Compressor overheated	Air pressure regulated too high
	Restricted air filter	Clean or replace air filter
	Worn piston rings	Replace piston rings
Compressor overheats	Clogged inlet filter	Clean or replace as necessary
	Dirty compressor, head, cylinder, or intercooler	Clean with compressed air
	Operating pressure too high	Reduce pressure
	Low oil level, or wrong oil used	Drain and replace oil
	Air tool or attachment air consumption exceeds compressor output - compressor run cycle too long	Reduce air consumption requirements

TROUBLESHOOTING

PROBLEM	CAUSE	REMEDY
Compressor Loads/Unloads or Starts/Stops excessively	Leaks in air system	Replace worn parts as necessary
	Worn or loose drive belts	Tighten or replace belts as necessary.
	Pilot valve or pressure switch differential adjusted too close	Have adjustments made by authorized service location
	Compressor valves not operating properly	Replace valves
	Compressor too small for application	Use compressor with higher air output ratings
Insufficient output - low discharge pressure	Clogged inlet filter	Clean or replace as necessary
	Leaks in air lines, valves, or fittings	Replaces parts as necessary
	Drive belts slipping	Tension belts
	Drain valve left open	Close drain valve
	Broken pressure gauge	Replace pressure gauge
	Leaking head gasket	Replace head gasket
	Dirty or plugged intercooler tubes	Remove and clean tubes
	Unloader pilot or pressure switch adjusted too low, or inoperative	Make necessary adjustments, or replace
	Worn or broken compressor valves	Replace worn parts
	Worn piston or rings	Replace worn parts
	Restrictive check valve	Clean check valve and replace if necessary
Motor stalls	Faulty unloader/check valve	Replace valve
	Valves incorrectly installed	Install valves correctly
	Drive belts too tight	Adjust belt tension
Water in crankcase oil - Oil gets dirty, valves or cylinders get rusty.	Cycle too short to vaporize moisture during compression	Allow for a longer operating cycle
	Compressor operating in cold conditions - inlet filter not protected against weather	Provide adequate protection against extreme weather conditions.
	System pressure leaking back through check valve	Check and replace check valve if necessary
	Wrong oil being used	Drain oil and replace with proper oil

TROUBLESHOOTING

PROBLEM	CAUSE	REMEDY
Excessive vibration	Loose compressor or motor	Tighten mounting bolts
	Excessive discharge pressure	Reduce operating pressure
	Compressor not level	Level compressor
	Leg bolt tightened too tight	Loose leg bolts
	Wrong oil being used	Drain and replace with proper oil
	Loose flywheel, drive pulley, or drive belt	Tighten parts and check belt tension. Tighten belt if needed.
	Worn rods, wrist pin, or main bearings	Check and replace worn parts
Compressor knocks	Compressor valves loose or broken	Check and replace worn or broken valves
	Inspect check valve for low pressure knock	Remove and clean check valve
Compressor uses too much oil	Clogged inlet filter	Clean or replace filter
	Wrong oil or viscosity being used	Drain and replace oil
	Oil level too high	Drain oil to proper level
	Crankcase breather valve malfunction	Replace crankcase breather valve
	Compressor runs unloaded too long	Increase load or stop compressor when not needed
	Compressor operating in cold conditions - inlet filter not protected	Provide protection against extreme weather conditions
	Worn piston rings	Replace piston rings
	Piston rings not seated	See below
Piston rings not seated	Allow 100 hours of normal operation for new rings to seat	
	Drain oil and refill with approved compressor oil	
Safety relief valve pops open	Pressure switch misadjusted	Have authorized service dealer adjust pressure switch.
	Pressure switch inoperable	Have switch serviced by authorized service dealer.
Air leaks from safety relief valve	Valve stuck or inoperable	Pull on ring and release. Replace valve if leak continues.

TROUBLESHOOTING

PROBLEM	CAUSE	REMEDY
Tool, sprayer, or other accessory doesn't work properly.	Air pressure too low or too high	Adjust regulator to provide pressure recommended by product manufacturer.
Unit runs continuously	Air usage greater than compressor output capacity	Check CFM requirements of air tool or accessory being used.
Noisy operation	Oil level low	Check for leaks, and add oil
	Internal wear or damage	Have unit serviced by authorized service dealer.
Air leaks at motor/pressure switch release valve while motor is running	Switch inoperable	Have authorized service dealer replace switch
Air leaks at motor/pressure switch release valve after motor stops.	Switch inoperable	Have authorized service dealer replace switch
Air leaks at fittings	Fittings loose	Tighten fittings
Air leaks at compressor head	Head bolts loose	Tighten bolts securely
Air blows out of inlet filter	Damaged reed valve	Have unit serviced by authorized service dealer
Crankcase oil appears milky when dipstick is checked	Water in oil from condensation	Change crankcase oil.
Moisture in discharge air	Excessive condensation in air tank	Drain tank more frequently. Tip unit when draining tank to drain all water.

STORAGE

- Open tank drain valve and allow all air pressure to escape.
- Drain all moisture out of tanks, and close drain valves.
- Disconnect air hose and wind hose carefully for storage
- Inspect compressor for wear, damage, or missing parts, and have repairs made promptly.
- Store unit in a dry, cool place.
- Storage in vehicles or trailers - secure the compressor to keep it from tipping or being damaged by contact with other equipment. Make sure gauges, fittings, and knobs are clear of objects that could cause damage.
- Do not place heavy objects on top of compressor.

PRIMESOURCE®
BUILDING PRODUCTS, INC.
and
BUILDING PRODUCTS CANADA CORPORATION
Are Itochu Companies

PNEUMATIC TOOL/COMPRESSOR WARRANTY

Pneumatic nailers, staplers & compressors marketed under the ***GRIP RITE TM*** brand are warranted to be free from defects in workmanship & materials (except rubber o-rings, bumpers, seals, driver blades, dipsticks, & air filters) for a period of one year from the date of original purchase.

This warranty will not apply when:

- The original receipt (or copy of the original receipt), showing the original purchase date, is not provided with tools/compressors sent in for warranty repair
- The tool/compressor has been misused, abused or improperly maintained
- Alterations have been made to the original tool/compressor
- Repairs have been attempted/made to the original tool/compressor by any entity other than a proprietary ***GRIP-RITE®*** service/warranty center or authorized service/warranty center
- Non-***GRIP-RITE TOOLS™ / GRIP-RITE COMPRESSORS™*** /parts have been used
- The tool has suffered any physical damage due to the use of non- ***GRIP-RITE*** ® approved fasteners*
- Repairs are required due to normal wear & tear
- The tool/compressor has been inadequately packaged leading to damage in-transit to the service/warranty center

*Approved fasteners include the following brands ***GRIP-RITE FAS'NERS™, FAS'NERS UNLIMITED™***

IN NO EVENT SHALL **PRIMESOURCE®** BE LIABLE FOR ANY INDIRECT, ACCIDENTAL OR CONSEQUENTAL DAMAGE FROM THE SALE OR USE OF THESE PRODUCTS. THIS DISCLAIMER APPLIES BOTH DURING & AFTER THE TERM OF WARRANTY. THIS IS OUR WARRANTY & IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILTY AND FITNESS FOR A PARTICULAR PURPOSE (EXCEPT AS MAY BE OTHERWISE PROVIDED BY LAW). THIS LIMITED WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS, WHICH VARY, FROM STATE TO STATE.

PNEUMATIC TOOL/COMPRESSOR SERVICE INFORMATION

Should any mechanical problems develop during the life of your equipment the following options are available for service and parts:

- Call **(800) 676-7777** where you will be routed to the nearest ***GRIP-RITE*** ® distribution center and directed to the nearest authorized service/warranty center
- Logging on to our website at **www.grip-rite.com** where you will find a list of our authorized service centers
- Contact the ***GRIP-RITE*** ® Factory Warranty Center directly at Phone: **(800) 207-9259** or Fax: **(800) 207-9614**
- In Canada Call (**866) 512-1418**

STEPS TO TAKE WHEN SHIPPING TOOLS

- Adequately package the product to avoid damage in-transit (in the case of pneumatic tools, the original blow mold plastic carrying case is considered adequate packaging)
- Provide the original/copy of receipt showing the original purchase date
- Insure your shipment with the shipping company. **PRIMESOURCE®** will not be responsible for any tool/compressor that is lost or damaged by the shipper on route to the **PRIMESOURCE®** service/warranty center

Distributed by/Distribuido por/Imported by/Importé par:

PRIMESOURCE®
BUILDING PRODUCTS, INC.
and
BUILDING PRODUCTS CANADA CORPORATION
are Itochu Companies

Carrollton, Texas 75006 USA
www.grip-rite.com